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EXAMINER				
SHIN, KYUNG H				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/579,575

Applicant(s)

LESCUYER ET AL.

Examiner

Kyung-Hye SHIN

Art Unit

2443

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4, 5, 14, 20 - 31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4, 5, 14, 20 - 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 July 2010 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date 27 July 2010
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 4, 5, 14, 20 - 31 are pending. Claims 4, 5, 14 have been amended. Claims 1 - 3, 6 - 13, 15 - 19 have been cancelled. Claims 20 - 31 are new. Claims 20, 26 are independent. File date is 5-17-2006.

- The 101 Rejections for Claims 1 - 10, 18, 19 have been withdrawn due to amendments to Claims 1, 18. Claims 1 and 18 have been cancelled.

Response to Arguments

2. Applicant's arguments have been fully considered but they are not persuasive.

A. Applicant argues: *mobile station (Remarks Page 6, Lines 23-25)*

Kavanaugh discloses a MS (Mobile Station) in radio (wireless) communication with a wireless network. (Kavanaugh para 008, ll 1-5: MS (mobile station) attaches and registers with a GPRS (General Packet Radio Service) mobile (wireless, radio) communications network; para 005, ll 11-13: mobile terminal (MT) connects to a network through a UTRAN access network)

The GSN is an endpoint for a GTP filtering tunnel. (Kavanaugh para 005, ll 3: two mobile stations connected or attached; para 007, ll 2-8: establish GTP tunnel between two GSN nodes; handle GTP connection when MS (mobile stations) roam)

B. Applicant argues: *Independent Claim 26 (Remarks Page 7, Line 6)*

Independent claim 26 has similar limitations as independent claim 20. Responses

to arguments for independent claim 20 answer arguments against independent claim 26.

C. Applicant argues: *Mohaban Reference (Remarks Page 7, Line 7-9)*

Mohaban is not used to disclose the indicated claim limitations. The Office Action indicates the claim limitations Mohaban is used to reject.

D. Applicant argues: *Dependent Claims 21 - 25 and 27 - 31 (Remarks Page 7, 10-11)*

Arguments against dependent claims are answered by responses to independent claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5, 20 - 23, 26 - 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kavanaugh et al.** (US PG PUB No. 20030081607) in view of **Hippelainen et al.** (US Patent No. 7,289,504).

Regarding Claim 5, Kavanaugh discloses the mobile station of claim 20, wherein each of the communications sessions to exchange packet data flows. (Kavanaugh para 014, ll 1-7: filtering data packets in GTP signaling messages and analyzing selected

messages; para 065, II 1-15: additional checks are performed providing additional security for PDP context messages)

Regarding Claim 20, Kavanaugh discloses a mobile station comprising:

- a) a wireless interface to communicate over a wireless link to an access network;
(Kavanaugh para 008, II 1-5: MS (mobile station) attaches and registers with a GPRS (General Packet Radio Service) mobile (wireless, radio) communications network; para 005, II 11-13: mobile terminal (MT) connects to a network through a UTRAN access network)
processing hardware configured to:
- c) in response to activation of each of the plural communication contexts, create a corresponding security task that furnishes a respective firewall function, wherein the firewall function of each of the security tasks is associated with a respective set of filtration parameters, wherein the set of filtration parameters for a first of the security tasks differs from the set of filtration parameters for a second of the security tasks; (Kavanaugh para 013, II 4-22: analyzing GTP messages against plurality of filtering criteria (at least one constituent parameter); analyzing messages selected from GTP path management and GTP tunnel management messages; para 065, II 1-15: checked to verify PDP (packets data protocol) context exists) and
- d) limit data flow in each of the communication sessions using the respective firewall function according to the corresponding set of filtration parameters.

(Kavanaugh para 034, II 1-10: GTP filter inspects all GTP packets (data flow) and performs specific filtering rules based on source and destination addresses, message types, and GTP version number (at least one parameter); GTP filters, controls what messages are permitted and denied; para 065, II 1-15: checked to verify PDP (packets data protocol) context exists)

Kavanaugh discloses for b): to activate communication contexts for communication of data in respective communication sessions. (Kavanaugh para 008, II 1-5: initiates an activate PDP context request; para 009, II 9-5-17: create PDP context request message, message sent over IP based network, send context response message when successful activation)

Kavanaugh does not explicitly disclose to activate plural communications contexts. However,

b) activate plural communication contexts for communication of data; (Hippelainen col 2, II 53-54: PDP contexts are activated and deactivated through mobility management procedures; col 8, II 20-31: PDP context table for storing activated PDP contexts of connections or sessions)

It would have been obvious to one of ordinary skill in the art to modify Kavanaugh to activate plural communications contexts as taught by Hippelainen. One of ordinary skill in the art would have been motivated to employ the teachings of Hippelainen for the benefits achieved from unique allocation of identification for a communications in an efficient manner. (Hippelainen col 3, II 52-55)

Regarding Claims 21, 27, Kavanaugh discloses the mobile station, method of claims 20, 26, wherein the communication contexts comprise Packet Data Protocol (PDP) contexts. (Kavanaugh para 008, II 1-5; para 009, II 9-5-17: initiates an activate PDP context request create PDP context request message, message sent over IP based network, send context response message when successful activation; para 065, II 1-15: checked to verify PDP (packets data protocol) context exists)

Kavanaugh does not explicitly disclose plural communications contexts.

Hippelainen discloses plural communications contexts. (Hippelainen col 2, II 53-54: PDP contexts are activated and deactivated through mobility management procedures; col 8, II 20-31: PDP context table for storing activated PDP contexts of connections or sessions)

It would have been obvious to one of ordinary skill in the art to modify Kavanaugh for plural communications contexts as taught by Hippelainen. One of ordinary skill in the art would have been motivated to employ the teachings of Hippelainen for the benefits achieved from unique allocation of identification for a communications in an efficient manner. (Hippelainen col 3, II 52-55)

Regarding Claims 22, 28, Kavanaugh discloses the mobile station, method of claims 21, 27.

Kavanaugh does not explicitly disclose PDP contexts simultaneously active.

However, Hippelainen discloses wherein the plural PDP contexts are simultaneously

active. (Hippelainen col 2, ll 30-32: table of multiple simultaneous PDP contexts active; col 10, ll 39-41: identifier depends on number of simultaneous PDP contexts which the GSN can support)

It would have been obvious to one of ordinary skill in the art to modify Kavanaugh for PDP contexts simultaneously active as taught by Hippelainen. One of ordinary skill in the art would have been motivated to employ the teachings of Hippelainen for the benefits achieved from unique allocation of identification for a communications in an efficient manner. (Hippelainen col 3, ll 52-55)

Regarding Claims 23, 29, Kavanaugh discloses the mobile station, method of claims 20, 26.

Kavanaugh does not disclose plural contexts simultaneously active.

However, Hippelainen discloses wherein the plural communication contexts are simultaneously active. (Hippelainen col 2, ll 30-32: table of multiple simultaneous PDP contexts active; col 10, ll 39-41: identifier depends on number of simultaneous PDP contexts which the GSN can support)

It would have been obvious to one of ordinary skill in the art to modify Kavanaugh for plural contexts simultaneously active as taught by Hippelainen. One of ordinary skill in the art would have been motivated to employ the teachings of Hippelainen for the benefits achieved from unique allocation of identification for a communications in an efficient manner. (Hippelainen col 3, ll 52-55)

Regarding Claim 26, Kavanaugh discloses a method comprising:

- an access network and core network; (Kavanaugh para 008, II 1-5: MS (mobile station) attaches and registers with a GPRS (General Packet Radio Service) mobile (wireless, radio) communications network; para 005, II 11-13: mobile terminal (MT) connects to a network through a UTRAN access network)
- b) in response to activation of each of the plural communication contexts, creating, in the mobile station, a corresponding security task that furnishes a respective firewall function, wherein the firewall function of each of the security tasks is associated with a respective set of filtration parameters, wherein the set of filtration parameters for a first of the security tasks differs from the set of filtration parameters for a second of the security tasks; (Kavanaugh para 013, II 4-22: analyzing GTP messages against plurality of filtering criteria (at least one constituent parameter); analyzing messages selected from GTP path management and GTP tunnel management messages; para 065, II 1-15: checked to verify PDP (packets data protocol) context exists) and
- c) limiting data flow in each of the communication sessions using the respective 12 firewall function in the mobile station according to the corresponding set of filtration parameters. (Kavanaugh para 034, II 1-10: GTP filter inspects all GTP packets (data flow) and performs specific filtering rules based on source and destination addresses, message types, and GTP version number (at least one parameter); GTP filters, controls what messages are permitted and denied;; para 065, II 1-15: checked to verify PDP (packets data protocol) context exists)

Kavanaugh discloses for a): activating, by a mobile station, communication contexts for communication of data in respective communication sessions between the mobile station and at least one other endpoint over. (Kavanaugh para 008, ll 1-5: initiates an activate PDP context request; para 009, ll 9-5-17: create PDP context request message, message sent over IP based network, send context response message when successful activation)

Kavanaugh does not explicitly disclose plural communications contexts.

However, Hippelainen discloses:

a) activating plural communication contexts for communication of data;

(Hippelainen col 2, ll 53-54: PDP contexts are activated and deactivated through mobility management procedures; col 8, ll 20-31: PDP context table for storing activated PDP contexts of connections or sessions)

It would have been obvious to one of ordinary skill in the art to modify Kavanaugh for plural communications contexts as taught by Hippelainen. One of ordinary skill in the art would have been motivated to employ the teachings of Hippelainen for the benefits achieved from unique allocation of identification for a communications in an efficient manner. (Hippelainen col 3, ll 52-55)

5. Claims **4, 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kavanaugh-Hippelainen** and further in view of **Mohaban et al.** (US Patent No. **7,346,677**).

Regarding Claim 4, Kavanaugh discloses the mobile station of claim 20, wherein activation of each of the communication contexts is based on parameters selected from among an address of the module or of equipment within which it is incorporated (Kavanaugh para 034, II 1-4: filtering rules based on source and destination addresses (communications module or equipment address)) or the target network's key. (Kavanaugh para 034, II 1-10: GTP filters, controls what messages are permitted and denied; para 36, II 1-7: path management protocol to check state of GSN nodes for which a packet data protocol (PDP) has been established)

Kavanaugh does not explicitly disclose a service quality associated with data flows exchanged.

However, Mohaban discloses a service quality associated with the data flows exchanged. (Kavanaugh para 034, II 1-4: filtering rules based on source and destination addresses (communications module or equipment address))

It would have been obvious to one of ordinary skill in the art to modify Kavanaugh a service quality associated with data flows exchanged as taught by Mohaban. One of ordinary skill in the art would have been motivated to employ the teachings of Mohaban for the benefits of the integration of applications into a policy based network system whereby application developers participate in the decision making concerning how to apply quality of service policies to a particular traffic flow. (Mohaban col 4, II 52-56)

Regarding Claim 14, Kavanaugh discloses the method of claim 26, wherein activation

of each of the communication contexts is based on parameters selected from among an address of the mobile station and an access point name. (Kavanaugh para 034, ll 1-10: inspects and performs specific filtering rules based on source and destination addresses (module address); GTP filters, controls what messages are permitted and denied; para 36, ll 1-7: path management protocol to check state of GSN nodes for which a packet data protocol (PDP) has been established; para 008, ll 1-5: specify access point name when registering mobile station

Kavanaugh does not explicitly disclose a service quality associated with the exchange of data flows.

However, Mohaban discloses a service quality associated the respective communication session. (Mohaban col 5, ll 31-37: determine processing policies that associate traffic flows with quality of service)

Motivation for Mohaban to disclose a service quality associated with the exchange of data flows is as stated in Claim 4 above.

6. Claims **24, 25, 30, 31** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kavanaugh-Hippelainen** and further in view of **Yang-Huffman** (US PG PUB No. 20030110252).

Regarding Claims 24, 30 Kavanaugh discloses the mobile station of claims 20, 26.

Kavanaugh discloses to modify one or more filtration parameters of a particular one of the sets of filtration parameters.

Kavanaugh does not explicitly disclose a user interface to receive user input.

However, Yang-Huffman discloses a user interface to receive user input to modify one or more filtration parameters of a particular one of the sets of filtration parameters. (Yang-Huffman para 032, ll 1-9: GUI (graphical user interface) for modifying data attributes (parameters))

It would have been obvious to one of ordinary skill in the art to modify x to a user interface to receive user input as taught by Yang-Huffman. One of ordinary skill in the art would have been motivated to employ the teachings of Yang-Huffman for the benefits and convenience achieved from remote management in controlling and managing multiple communications contexts from a single server. (Yang-Huffman para 032, ll 10-11)

Regarding Claims 25, 31, Kavanaugh discloses the mobile station, method of claims 24, 30.

Kavanaugh does not explicitly disclose a graphical user interface.

However, Yang-Huffman discloses wherein the user interface is a graphical user interface. (Yang-Huffman para 032, ll 1-9: GUI (graphical user interface) for modifying data attributes (parameters))

It would have been obvious to one of ordinary skill in the art to modify Kavanaugh for a graphical user interface as taught by Yang-Huffman. One of ordinary skill in the art would have been motivated to employ the teachings of Yang-Huffman for the benefits and convenience achieved from remote management in controlling and

managing multiple communications contexts from a single server. (Yang-Huffman para 032, II 10-11)

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyung-Hye SHIN whose telephone number is (571)272-3920. The examiner can normally be reached on 9:30 am - 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia L. Dollinger can be reached on (571) 272-4170. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

October 8, 2010

/Kyung-Hye SHIN/
Primary Examiner, Art Unit 2443